

LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Canceled)

2. (Previously presented) An electronic settlement system according to claim 54, wherein said ~~billing~~second terminal connects to said mediating server via at least one of a commercial telephone line and a private line, and said ~~paying~~first terminal connects to said mediating server via at least one of a radio telephone communication and a video telephone communication.

3.-10. (Canceled)

11. (Currently amended) An ~~transaction~~ apparatus according to claim 71, wherein said second communication unit detects a calling telephone number of the ~~paying~~first terminal, and
said processing unit retrieves information about a user of the ~~paying~~first terminal from said ~~paying~~first terminal database based on the calling telephone number, and said processing unit checks at least one of a registration status of the user, a payment history of the user, and an available amount of the user.

12. (Currently amended) An ~~transaction~~ apparatus according to claim 11, wherein said processing unit retrieves at least a part of an attribute information of the user of the ~~paying~~first terminal from said ~~paying~~first terminal database, and said first communication unit

transmits to the ~~billing~~second terminal at least a part of said attribute information of the user of the ~~paying~~first terminal.

13. (Currently amended) An ~~transaction~~ apparatus according to claim 11, wherein when said second communication unit receives a message which demands a purchase history of the user of the ~~paying~~first terminal, said processing unit retrieves said purchase history of the user from said ~~paying~~first terminal database, and said second communication unit transmits said purchase history to the ~~paying~~first terminal.

14.-53. (Canceled)

54. (Currently amended) An electronic settlement system for effecting a ~~transaction~~authentication through a communication network, comprising:

a ~~paying~~first terminal for purchasing an item by a user thereof, the ~~paying~~first terminal including an input unit for inputting authentication information of the user and connecting to the communication network;

a ~~billing~~second terminal, which is at least one of a cellular phone and a PDA, for charging the user of the ~~paying~~first terminal a purchase amount, the ~~billing~~second terminal being connected to the communication network;

a database for storing authentication information of the user and a plurality of authentication methods; and

a mediating server which performs the settlement of the ~~transaction~~authentication by mediating a communication between the ~~paying~~first terminal and the ~~billing~~second terminal one-to-one when receiving a ~~transaction~~ ID information from one of the ~~paying~~first terminal and

the billingsecond terminal so as to determine that the payingfirst terminal and the billingsecond terminal are participating in a same purchase, the mediating server setting at least one of the authentication methods selected by either one of the user of the payingfirst terminal and a clerk of the billingsecond terminal in accordance with a content of the transactionauthentication, the selected authentication method being processed between the payingfirst terminal and the billingsecond terminal that have been determined to be participating in the same purchase, wherein one of the mediating server and the billingsecond terminal authenticates the user by using the authentication information stored in the database,

wherein when receiving a request signal from one of the first terminal and the second terminal, the mediating server sets up and transmits the ID information to one of the first terminal and the second terminal which sent the request signal to the mediating server, and when receiving the same ID information from one of the second terminal and the first terminal, the mediating server mediates the communication with the first terminal and the second terminal, and

wherein the request signal includes a unique ID of at least one of the first terminal and the second terminal.

55. (Cancelled)

56. (Currently amended) The electronic settlement system according to claim 54, wherein said database includes

a payingfirst terminal database for storing the authentication information of the user and the authentication methods demanded by the user of said payingfirst terminal; and

a ~~billing~~second terminal database for storing an authentication method demanded by the clerk of the ~~billing~~second terminal, wherein the mediating server sets an agreeable authentication method in accordance with the authentication method stored in the ~~paying~~first terminal database and the authentication method stored in the ~~billing~~second terminal database.

57. (Currently amended) An electronic settlement system according to claim 56, wherein the mediating server stores respective agreeable authentication methods in relation to a combination of the authentication method demanded by the user and the authentication method demanded by the clerk, and the mediating server sets the agreeable authentication method by verifying the authentication methods stored in the ~~paying~~first terminal database and the ~~billing~~second terminal database.

58. (Currently amended) An electronic settlement system according to claim 57, wherein the mediating server includes the ~~billing~~second terminal database and the ~~paying~~first terminal database.

59. (Currently amended) An electronic settlement system according to claim 57, wherein each of the ~~billing~~second terminal database and the ~~paying~~first terminal database stores at least one of: a visual authentication method, a password authentication method a voice authentication method, an iris image authentication method, a retina image authentication method, and a fingerprint authentication method.

60. (Currently amended) An electronic settlement system according to claim 57, wherein the ~~paying~~first terminal database stores at least one of the authentication methods in

relation to a type of the authentication, the payingfirst terminal database sends the mediating server a type-signal which indicates the type of the authentication from the payingfirst terminal, and the mediating server retrieves at least one of the authentication methods in accordance with the type-signal received from the payingfirst terminal.

61. (Currently amended) An electronic settlement system according to claim 57, wherein the payingfirst terminal database stores different authentication methods in accordance with a purchase amount limit predetermined by the user, the billingsecond terminal sends the mediating server the purchase amount, and the mediating server retrieves one of the authentication methods from the payingfirst terminal database, based on the purchase amount received from the billingsecond terminal.

62. (Currently amended) An electronic settlement system according to claim 57, wherein the billingsecond terminal database stores different authentication methods in accordance with a purchase amount limit predetermined by the billingsecond terminal, the billingsecond terminal sends the mediating server the purchase amount, and the mediating server retrieves one of the authentication methods from the billingsecond terminal database, based on the purchase amount received from the billingsecond terminal.

63. (Currently amended) An electronic settlement system according to claim 57, wherein the mediating server sets the authentication demanded by the payingfirst terminal as the agreeable authentication method if the billingsecond terminal appoints no authentication method, and the mediating server sets the authentication method demanded by the billingsecond terminal

as the agreeable authentication method if the ~~paying~~first terminal does not set the authentication method.

64. (Currently amended) An electronic settlement system according to claim 57, wherein the ~~paying~~first terminal is a cellular phone and the input unit of the cellular phone inputs at least one of a facial portrait, a voice, an iris image, a retina image, and a fingerprint image of the user of the ~~paying~~first terminal, and the ~~billing~~second terminal is a cashier terminal including an input unit and the input unit of the cashier terminal inputs the at least one of the facial portrait, the voice, the iris image, the retina image, the fingerprint image of the user.

65. (Previously Presented) An electronic settlement system according to claim 64, wherein the cashier terminal is provided at a retailer.

66. (Previously presented) An electronic settlement system according to claim 64, wherein the cashier terminal is provided on at least one of a shopping server and an Internet.

67. (Currently amended) An electronic settlement system according to claim 57, wherein if an authentication accuracy of the authentication method demanded by the ~~billing~~second terminal differs from an authentication accuracy of the authentication method demanded by the user, the authentication method having higher authentication accuracy is selected for the agreeable authentication method.

68. (Currently amended) An electronic settlement system according to claim 57, wherein if the authentication method demanded by the ~~billing~~second terminal does not match the authentication method demanded by the user, the synchronizing server refuses to authenticate the

user and transmits to the ~~paying~~first terminal information indicating that the authentication is refused.

69. (Cancelled)

70. (Previously presented) An electronic settlement system according to claim 60, wherein the authentication method is invoked by the user.

71. (Currently amended) An ~~transaction~~-apparatus for effecting an ~~transaction~~authentication through a communication network with a ~~paying~~first terminal including an input unit for inputting authentication information of a user and a ~~billing~~second terminal, which is at least one of a cellular phone and a PDA, for charging the user a purchase amount, the ~~transaction~~-apparatus comprising:

a first communication unit connected to the ~~billing~~second terminal via a first communication network;

a second communication unit connected to the ~~paying~~first terminal via a second communication network;

a database for storing the authentication information of the user and a plurality of authentication methods; and

a processing unit for performing the settlement of the ~~transaction~~authentication by mediating a communication between the ~~paying~~first terminal and the ~~billing~~second terminal one-to-one when one of the first communication unit and the second communication unit receives an ~~transaction~~-ID information from one of the ~~billing~~second terminal and the ~~paying~~first terminal so as to determine that the ~~billing~~second terminal and the ~~paying~~first terminal are participating in a

same purchase, wherein the processing unit processes at least one of the authentication of the user or mediates the authentication of the user selected by either one of the user of the payingfirst terminal and a clerk of the billingsecond terminal in accordance with a content of the ~~transaction~~authentication, the selected authentication method being processed by the payingfirst terminal and the billingsecond terminal, by using the authentication information stored in the database,

wherein, when one of the first communication unit and the second communication unit receives a request signal from one of the second terminal and the first terminal, the processing unit sets up the ID information and one of the first and second communication units transmits the ID information to one of the second terminal and the first terminal which sent the request signal, and when one of the first and second communication units receives the same ID information from one of the first terminal and the second terminal, the processing unit mediates the communication between the first terminal and the second terminal, and

wherein the request signal includes a unique ID of at least one of the first terminal and the second terminal.

72. (Cancelled)

73. (Currently amended) An ~~transaction~~-apparatus according to claim 71, wherein said database includes

a payingfirst terminal database for storing the authentication information of the user and the authentication methods demanded by the user of said payingfirst terminal; and

a ~~billingsecond~~ terminal database for storing an authentication method demanded by the clerk of the ~~billingsecond~~ terminal, wherein the processing unit sets up an agreeable authentication method in accordance with the authentication methods stored in the ~~payingfirst~~ terminal database and the ~~billingsecond~~ terminal database.

74. (Currently amended) An ~~transaction~~-apparatus according to claim 73, wherein each of the ~~billingsecond~~ terminal database and the ~~payingfirst~~ terminal database stores at least one of: a visual authentication method, a password authentication method a voice authentication method, an iris image authentication method, a retina image authentication method, and a fingerprint authentication method.

75. (Currently amended) An ~~transaction~~-apparatus according to claim 71, wherein the ~~payingfirst~~ terminal database stores different authentication methods in accordance with a purchase amount limit predetermined by the user, the first communication unit receives the purchase amount from the ~~billingsecond~~ terminal, and the processing unit retrieves one of the authentication methods from the ~~payingfirst~~ terminal database, based on the purchase amount received by the second communication unit.

76. (Currently amended) An ~~transaction~~-apparatus according to claim 71, wherein the ~~payingfirst~~ terminal database stores at least one of the authentication methods in relation to a type of the authentication, the second communication unit receives a type-signal which indicates the type of the authentication from the ~~payingfirst~~ terminal, and the processing unit retrieves at least one of the authentication methods in accordance with the type-signal from the ~~payingfirst~~ terminal.

77. (Currently amended) An ~~transaction~~ apparatus according to claim 73, wherein the ~~billingsecond~~ terminal database stores different authentication methods in accordance with a purchase amount limit predetermined by the ~~billingsecond~~ terminal, the first communication unit receives the purchase amount from the ~~billingsecond~~ terminal, and the processing unit retrieves one of the authentication methods from the ~~billingsecond~~ terminal database, based on the purchase amount received by the first communication unit.

78. (Currently amended) An ~~transaction~~ apparatus according to claim 73, wherein the processing unit sets the authentication method demanded by the ~~payingfirst~~ terminal as the agreeable authentication method if the ~~billingsecond~~ terminal does not set the authentication method, and the processing unit sets the authentication method demanded by the ~~billingsecond~~ terminal as the agreeable authentication method if the ~~payingfirst~~ terminal does not set the authentication method.

79. (Currently amended) An ~~transaction~~ apparatus according to claim 71, wherein the ~~payingfirst~~ terminal is a cellular phone and the input unit of the cellular phone inputs at least one of a facial portrait, a voice, an iris image, a retina image, and a fingerprint image of the user, and the ~~billingsecond~~ terminal is a cashier terminal including an input unit and the input unit of the cashier terminal inputs the at least one of the facial portrait, the voice, the iris image, the retina image, and the fingerprint image of the user.

80. (Previously Presented) An ~~transaction~~ apparatus according to claim 79, wherein the cashier terminal is provided at a retailer.

81. (Previously presented) An ~~transaction~~-apparatus according to claim 79, wherein the cashier terminal is provided on at least one of a shopping server and an Internet.

82. (Canceled)

83. (Previously presented) An ~~transaction~~-apparatus according to claim 76, wherein the authentication method is invoked by the user.

84. (Currently amended) A recording medium which stores a program for a computer, communicating with a ~~billing~~second terminal, which is at least one of a cellular phone and a PDA, performing billing of a ~~transaction~~authentication and with a ~~paying~~first terminal performing paying of the ~~transaction~~authentication, and performs a settlement of the ~~transaction~~authentication, the program comprising:

a first communication module which prompts to communicate to the ~~billing~~second terminal via a first communication network;

a second communication module connected to the ~~paying~~first terminal via a second communication network;

a storage module for storing authentication information of a user and a plurality of authentication methods; and

a processing module which performs the settlement of the ~~transaction~~authentication by mediating a communication between the ~~paying~~first terminal and the ~~billing~~second terminal one-to-one when one of the first communication unit and the second communication unit receives an ~~transaction~~-ID information from one of the ~~billing~~second terminal and the ~~paying~~first terminal so as to determine that the ~~billing~~second terminal and the

~~paying~~first terminal are participating in a same purchase, wherein the processing module processes an authentication of the user or mediates the authentication of the user processed by the ~~paying~~first terminal and the ~~billing~~second terminal, by using the authentication information stored in the storage module in a manner selected by either one of the user of the ~~paying~~first terminal and a clerk of the ~~billing~~second terminal in accordance with a content of the ~~transaction~~authentication.

wherein, when one of the first communication module and the second communication module receives a request signal from one of the second terminal and the first terminal, the processing module sets up the ID information and one of the first and second communication modules transmits the ID information to one of the second terminal and the first terminal which sent the request signal, and when one of the first and second communication modules receives the same ID information from one of the first terminal and the second terminal, the processing module mediates the communication between the first terminal and the second terminal, and

wherein the request signal includes a unique ID of at least one of the first communication module and the second communication module.

85. (Previously presented) A recording medium according to claim 84, wherein the second communication module receives an authentication method invoked by the user and the processing module processes the authentication of the user or intermediates the authentication of the user, in accordance with the authenticating method invoked by the user.

86. (Currently amended) A method of effecting a ~~transaction~~authentication through a communication network, comprising:

inputting authentication information of a user purchasing an item through a ~~paying~~first terminal to the communication network;

charging the user of the ~~paying~~first terminal a purchase amount through a ~~billing~~second terminal, which is at least one of a cellular phone and a PDA, over the communication network;

storing authentication information of the user and a plurality of authentication methods in a database; and

performing settlement of the ~~transaction~~authentication by mediating a communication between the ~~paying~~first terminal and the ~~billing~~second terminal one-to-one when receiving an ~~transaction~~-ID information from one of the ~~paying~~first terminal and the ~~billing~~second terminal so as to determine that the ~~paying~~first terminal and the ~~billing~~second terminal are participating in a same purchase, the mediating using at least one of the authentication methods that has been selected by either one of the user of the ~~paying~~first terminal and a clerk of the ~~billing~~second terminal in accordance with a content of the ~~transaction~~authentication, the selected authentication method being processed between the ~~paying~~first terminal and the ~~billing~~second terminal that have been determined to be participating in the same purchase, wherein one of the mediating and the charging authenticates the user by using the authentication information stored in the database,

wherein, when receiving a request signal from one of the first terminal and the second terminal, the mediating involves set up and transmission of the ID information to one of the first terminal and the second terminal which sent the request signal, and when receiving the

same ID information from one of the second terminal and the first terminal, the mediating involves communication with the first terminal and the second terminal, and

wherein the request signal includes a unique ID of at least one of the first terminal and the second terminal.

87. (New) An electronic settlement system for effecting a transaction authentication through a communication network, comprising:

a first terminal for purchasing an item by a user thereof, the first terminal including an input unit for inputting authentication information of the user and connecting to the communication network;

a second terminal, which is at least one of a cellular phone and a PDA, for charging the user of the first terminal a purchase amount, the second terminal being connected to the communication network;

a database for storing authentication information of the user and a plurality of authentication methods; and

a mediating server which performs the settlement of the transaction authentication by mediating a communication between the first terminal and the second terminal one-to-one when receiving an transaction ID information from one of the first terminal and the second terminal so as to determine that the first terminal and the second terminal are participating in a same purchase, the mediating server setting at least one of the authentication methods selected by either one of the user of the first terminal and a clerk of the second terminal in accordance with a content of the transaction authentication, the selected authentication method being processed between the first terminal and the second terminal that have been determined to be

participating in the same purchase, wherein one of the mediating server and the second terminal authenticates the user by using the authentication information stored in the database,

wherein said database includes a first terminal database for storing the authentication information of the user and the authentication methods demanded by the user of said first terminal; and

a second terminal database for storing an authentication method demanded by the clerk of the second terminal, wherein the mediating server sets an agreeable authentication method in accordance with the authentication method stored in the first terminal database and the authentication method stored in the second terminal database.